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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,748	11/01/2000	Jeffrey R. Aamodt	06576.105031	2107

7590 06/23/2003  
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EXAMINER

BASOM, BLAINE T

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 06/23/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/703,748

Applicant(s)

AAMODT ET AL.

Examiner

Blaine Basom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION*****Response to Arguments***

With respect to the restriction requirement imposed upon the present application, the Applicants argue that the two distinct inventions claimed in the present application do not present a serious burden upon the examiner, and that therefore, the restriction requirement should be withdrawn. The Examiner respectfully disagrees with this argument. The first invention, drawn to claims 1-14, expresses a method for modifying the data characteristics and physical characteristics of nodes within a network diagram. This invention would be classified in subclass 345/765. The second invention, drawn to claims 15-18, expresses a method for generating a network diagram with nodes at different magnification levels, and would be classified in subclass 345/859. Since the second invention would require further search and consideration, it is understood that it would present a serious burden upon the examiner. Except for a general allegation that the inventions are "substantially related," the Applicants have failed to provide any factual evidence supporting this allegation. As set forth above, the restriction on the record is proper and has been maintained.

Thus, the Applicant's election with traverse of Group I, claims 1-14, is acknowledged. The traversal, however, is not found persuasive, as is shown in the previous paragraph. The restriction requirement is still deemed proper and is therefore made FINAL.

### *Claim Objections*

Claim 10 is objected to under 37 CFR 1.75(c), as being of improper dependent form. The claim is written in the form of a preamble made to depend on another claim. The stated preamble is not given patentable weight as it fails to breathe life, meaning, and vitality into the claims. As such, the claims fail to further limit the subject matter of the claim(s) upon which they depend. See MPEP §§ 608.01(n) and 2111.02. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,704,028, which is attributed to Schanel et al. (and hereafter referred to as "Schanel"), and also over U.S. Patent No. 5,680,530, which is attributed to Selfridge et al. (and hereafter referred to as "Selfridge"). In general, Schanel presents a computer application for creating and displaying a flow chart. Figure 2 illustrates the graphical user interface of this application, wherein particularly, reference number 28 designates an exemplary flow chart created using the application. As shown in figure 2, this flow chart consists of a plurality of nodes and links. Each

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node is displayed as one of a plurality of different shapes, and each link is displayed as a line connecting two such shapes. Since this flow chart consists of a plurality of nodes, which are connected via links, the flow chart is considered a network diagram like that expressed in the present application. Further regarding the present application, the graphical user interface of Figure 2 also includes various buttons for modifying the physical attributes of the nodes, in addition to the data displayed by the nodes (see column 6, line 30 – column 7, line 59). Thus the nodes of the flowchart may be customized by the user. Consequently, the application of Schanel is considered to teach a method for customizing the nodes of a network diagram.

With respect to claim 1, the user interface of Schanel's application displays a plurality of options for modifying one or more of the physical characteristics of the nodes within a network diagram, i.e. flowchart (see column 6, line 44 – column 7, line 6). For example, Schanel discloses that a "fill pattern button" is displayed in the user interface, wherein this button is used to specify the pattern or color with which to fill in selected nodes (see column 6, lines 57-61). Similarly, the user interface includes a "border style button," which is used to specify the border style of selected nodes (see column 6, lines 45-50). Schanel also discloses that these nodes in the network diagram may include one or more data fields (see column 13, lines 16-51). These data fields may be added to the nodes in the chart by using a "setup fields dialog box," which also contains various options for modifying the characteristics of these data fields (see figure 9, and column 13, line 63 – column 14, line 56). For example, Schanel discloses that the setup fields dialog box includes a field format option, which allows the user to specify the specific data format for a particular data field (see column 14, lines 20-31). Moreover, Schanel discloses that a "field preferences dialog box" may be used to specify the appearance of the data fields on the

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chart (see figure 10, and column 14, line 57 – column 15, line 39). For instance, the field preferences dialog box includes options to specify the font and size of the data in a particular data field (see column 15, lines 13-16). Schanel thus teaches displaying, via this setup fields dialog box and field preferences dialog box, one or more options for modifying one or more characteristics of the data contained within the respective nodes of a network diagram. It is understood that a user may select one or more of these options in order to modify the appearance of the data presented in the flow chart. Similarly, it is understood that the user may select one or more of the options presented in the user interface of figure 2, which as described above, result in the modification of the physical characteristics of the nodes within the network diagram. Schanel discloses that these selected options are applied to one or more of the nodes and data fields within the network diagram (for example, see column 6, line 62 – column 7, line 6 and column 14, lines 49-52). However, and in regard to the claimed invention, Schanel does not explicitly disclose displaying a preview in response to selecting these options, as is recited in claim 1.

Like Schanel, Selfridge presents an application for creating a flowchart, i.e. network diagram, which contains a plurality of nodes and links that cumulatively denote the tasks or features required in implementing a work product (see the abstract). Further like Schanel, Selfridge discloses that the visual aspects of these nodes may be modified by the user (see column 3, lines 32-38). Figure 9 of Selfridge presents the interface which allows the user to modify the visual aspects of the nodes. Regarding the claimed invention, this interface contains a section, designated by reference number 911, which permits the user to preview the results of his or her modifications to the nodes (see column 18, lines 8-10).

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It would therefore have been obvious to one of ordinary skill in the art, having the teachings of Schanel and Selfridge before him at the time the invention was made, to modify the method taught by Schanel to include the preview capabilities of Selfridge, such that a preview of the node is displayed in response to selecting the options to modify the physical characteristics and data characteristics of the nodes. It would have been advantageous to one of ordinary skill to utilize such combination because displaying a preview allows the user to quickly view and ascertain if his or her modifications are sufficient, as is demonstrated by Selfridge. A preview thus allows a user to more efficiently modify the characteristics of a node to a user's taste than that of applying the modification, re-displaying the network diagram to see if the modifications are suitable, and then applying more modifications if the original modifications were not suitable.

Regarding claim 2, Schanel discloses that the user interface of figure 2 includes a "shape tool button," which allows a user to select a shape from a "shape pallet" and place the selected shape into a network diagram (see column 7, lines 20-22). As expressed above, these shapes are understood to represent nodes within the network diagram. Reference number 60 in figure 2 indicates the shape pallet expressed by Schanel. As displayed by this shape pallet, the user may choose from a variety of different shapes to create a node. There is thus listed a plurality of categories of nodes for the network diagram, each category corresponding to a different shape. Further regarding claim 2, Schanel states that,

*[s]electing shape tool button 64 also allows the user to choose shape attributes and properties. In the example of window 27 in FIG. 2, top tool bar 30 displays the shape tool buttons available when shape tool button 64 is selected. (See column 7, lines 22-25).*

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Therefore the buttons of the "top tool bar" are associated with each of the different shapes.

These buttons in the top tool bar designate those options described above, which are for modifying the physical characteristics of the nodes within a network diagram. Consequently, it is understood that Schanel further teaches associating these selected options with the corresponding categories, i.e. shapes, of nodes.

Concerning claim 11, Schanel, as modified by the teachings of Selfridge, presents a method comprising: listing one or more categories of nodes for a network diagram; displaying options for modifying one or more physical characteristics of nodes within the network diagram; displaying one or more options for modifying one or more characteristics of data that is contained within the respective nodes within the network diagram; selecting one or more of the options; associating the selected options with corresponding categories of nodes; displaying a preview in response to selecting the options; and applying the selected options to one or more nodes in a network diagram. Schanel however does not explicitly teach displaying an indicator that shows a highlight filter is activated, and displaying a highlight filter preview window in response to selecting the options for modifying the physical characteristics of the nodes or the characteristics of data contained within the respective nodes of the network diagram, as is recited in claim 11.

As described above, Selfridge presents an application for creating a flowchart, i.e. network diagram, which contains a plurality of nodes and links that cumulatively denote the tasks or features required in implementing a work product. Moreover, Selfridge teaches that the visual appearance of these nodes may be based on the data, i.e. attributes, contained within the nodes, and that this mapping between the data and the visual appearance of the nodes may be set



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by the user (see column 16, lines 36-60). These mappings highlight nodes in the diagram according to the value specified in the nodes. For example, the font or color of the data and nodes may be altered according to the data within the node (see column 17, lines 51-53). Thus these mappings are considered a highlight filter like that expressed in the claimed invention. Further regarding the claimed invention, figure 9 shows the user interface which allows the user to create this mapping. When thus user is done creating the mapping, thus user selects a "write mappings" button, which alters the network diagram according to the specified mappings (see column 18, lines 16-18). It is understood that the completed interface of figure 9 and selected write mappings button, which results in the altered network diagram, serves as an indicator that such a highlight filter is activated. Selfridge further discloses that a specific section of figure 9 permits a user to preview the results of his mappings (see column 18, lines 8-10).

It would therefore have been obvious to one of ordinary skill in the art, having the teachings of Schanel and Selfridge before him at the time the invention was made, to further modify the method taught by Schanel to include the mapping capabilities of Selfridge. It would have been advantageous to one of ordinary skill to utilize such a combination because creating mappings that associate the visual aspects of the nodes with the data contained within the nodes allows the user to more efficiently analyze the network diagram, as is demonstrated by Selfridge.

As per claim 3, it is understood that the options for modifying the physical characteristics of the nodes and the characteristics of the data displayed in the nodes, as are taught by Schanel, are applied to *selected* nodes. For example, Schanel states that the border style button, which is described above, may be used to "choose a border style for a **selected** shape" (see column 6, lines 45-50). The combination of Schanel and Selfridge described above thus teaches selecting

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one or more nodes within a network diagram, and applying selected options to only these selected nodes.

Concerning claims 4 and 12, Selfridge states that the section permits a user to preview the results of his or her modifications to the nodes, as is described above, more specifically “permits a user to see what a **node** or link made using a particular mapping looks like” (see column 17, lines 33-40). The “particular mapping” denotes the physical characteristics selected for the node, and their association with the data displayed in the node (see column 16, lines 36-60). Consequently, it is understood that the combination of Schanel and Selfridge described above thus teaches previewing the results of modifying the nodes by displaying data from a particular node.

In regard to claims 5 and 13, the options for modifying the physical characteristics of the nodes within a network diagram, as are taught by Schanel, include options for modifying the border shape (see column 7, lines 7-15), the border width (see column 6, lines 50-55), the border color (see column 6, lines 62-65), and the fill pattern (see column 6, lines 57-61) for the nodes.

In reference to claims 6, 7, and 14, the setup field dialog box disclosed by Schanel allows the user to create data fields to be placed within the nodes of a network diagram (see column 14, lines 42-49). Schanel further discloses that “[a] field can be stored as a template so that they can be used in other charts” (see column 13, lines 60-61). Here, “charts” is understood to refer to a network diagram. It is additionally understood that a user may save one or more fields templates for future network diagrams, or alternatively, may access previously saved templates from prior network diagrams. Consequently, it is understood that the combination of Schanel and Selfridge

described above thus teaches the step of listing one or more predefined templates and the step of obtaining user defined data templates.

In regard to claim 8, the setup field dialog box disclosed by Schanel and described above includes a "field listings" pane, which lists the names of the data fields associated with the network diagram (see column 13, line 63 – column 14, line 2). For each of these data fields, a user may indicate if it is to be displayed within the nodes of the network diagram (see column 14, lines 7-9). Thus, since for each field name in the field listing pane the user is presented an option of display the field, the field listings pane is understood to list options for identifying names of data fields to be displayed within respective nodes.

As per claim 9, the field preference dialog box disclosed by Schanel and described above includes a "font size selector" that allows the user to specify the size of the font used in generating the data fields of the network diagram (see column 15, lines 13-16). It is understood that increasing the size of the font increases the size of the data fields and similarly, decreasing the size of the font decreases the size of the data fields. As shown in figure 2, these data fields are organized within the nodes in a grid-type layout, specifically a 3 X 1 grid. Thus adjusting the size of the font, adjusts the size of the data fields, which correspondingly adjusts the size of this grid. Consequently, it is understood that listing different font sizes, as the font size selector does, equivalently lists options for adjusting the size of a data grid for respective nodes within the network diagram.

Referring to claim 10, Schanel discloses that the above-described method is implemented as a software program stored on a computer-readable medium (see column 5, lines 49-55). It is thus understood that the above-described method of Schanel and Selfridge may be implemented

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on a computer readable medium having computer-executable instructions for performing the steps recited in claim 1.

### *Conclusion*

The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. The applicant is required under 37 C.F.R. §1.111(C) to consider these references fully when responding to this action. The Eaton U.S. Patent cited therein presents a method for creating a network diagram describing genealogical information, wherein the amount of data in each of the nodes in this network diagram may be adjusted by the user. The Kumar et al. U.S. Patent cited therein presents a method for creating a network diagram wherein the physical characteristics of the nodes may be modified by the user. Lastly, the Hogan et al. U.S. Patent cited therein presents a method for creating a graph whose physical appearance may be modified by the user.

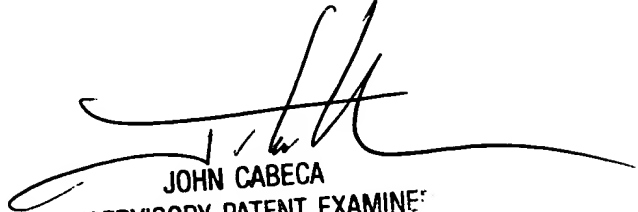
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom whose telephone number is (703) 305-7694. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca, can be reached on (703) 308-3116. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7238 for regular communications and (703) 746-7240 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

btb  
June 13, 2003



JOHN CABECA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100